

AQUATICS



OBL1

Omega Backstroke Ledge
User's Manual

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Version 1.1

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Caution and safety precautions

- Never use any other charger than the supplied or a type approved by Swiss Timing. This could destroy the battery, cause damage to unit, and possibly cause personal injury due to fire or/and electrical shock.
- Never bypass a power cord ground lead by breaking off the ground pin, or by using inappropriate extension cords or adapters.
- Never plug a power cord into the AC power source until you have made sure that all installation, cabling and power levels, are proper, and that the applicable procedures in this manual have been followed.
- Protect the equipment against splashing, rain and excessive sun rays.
- Never use the device if it is damaged or insecure.
- Verify the selection of the power distribution.
- Verify that the voltage quoted on the rating plate is the same as your voltage. Connect the appliance only to power sockets with protective earth. The use of incorrect connection voids warranty.
- This program may be modified at any time without prior notification.
- Do not open the case; there is nothing that needs servicing inside it. Nevertheless, if the case must be opened, you must call for some qualified personnel. The power supply cable must be disconnected before opening the case.
- During the transport of all Swiss Timing equipment delivered with a reusable carry case, the said case should be used at all times. This is imperative to limit the damage, such as shocks or vibration that can be caused to the units during transport.
- The same cases should also be used when returning equipment to Swiss Timing for repair. Swiss Timing reserves the right to refuse all guarantees if this condition is not fulfilled.
- If the installation includes a horn, be sure to maintain a sufficient security distance from the public.

Documentation Updates

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Environment



This symbol indicates that this product should not be disposed with household waste. It has to be returned to a local authorized collection system. By following this procedure you will contribute to the protection of the environment and human health. The recycling of the materials will help to conserve natural resources.

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1 INTRODUCTION

The **Omega Backstroke Ledge (OBL1)** is the ideal complement to the **Omega Starting Blocks OSB11, OSB12 and OSB14** for the backstroke swimming. This device has been fully developed according to the FINA rules (handbook 2013 – 2017). OBL1 allows the best starts for backstroke swimming competitions of all levels and categories.

Simply/easily mounted: it can be used during the entrance in the water and once the race has begun it can be removed not to bother the swimmers during the competition.

Help psychologically the backstroke swimmer: this new device gives swimmers the assurance they did not have before when entering the water. This takes away pressure before starting the competition thanks to the anti-skid surface that covers the grip mechanism of grasp. It allows a better grasp to the backstroke swimmers when entering the water.

Adjustable according to the swimmer's size: the aptitude to regulate the length of the Backstroke Start is an advantage to bear in mind, since not all backstroke swimmers have the same size.

Better power and force when entering the water: thanks to the Backstroke Start, the swimmers gain in power and force when entering the water. Through the training with this device, swimmers gain confidence and perform better.

You now have the opportunity to improve your backstroke swimming performance. See for yourself how many milliseconds you can gain at the start!

Please read this manual carefully before starting to use your **Backstroke Ledge**.

2 PRECAUTIONS AND WARNING

2.1 Before using the Backstroke Ledge

Always check the unit to verify the full integrity of all the parts. If a single component is broken, gets loose or shows cracks, **DO NOT USE** the device.

2.2 Using the Backstroke Ledge

You must train a lot before each competition to progressively acquire all the skills to control your backstroke start. Before each start, always make sure that there is no obstacles that you might hit. Consider that with the Backstroke Ledge your starting jump is much longer than usual.

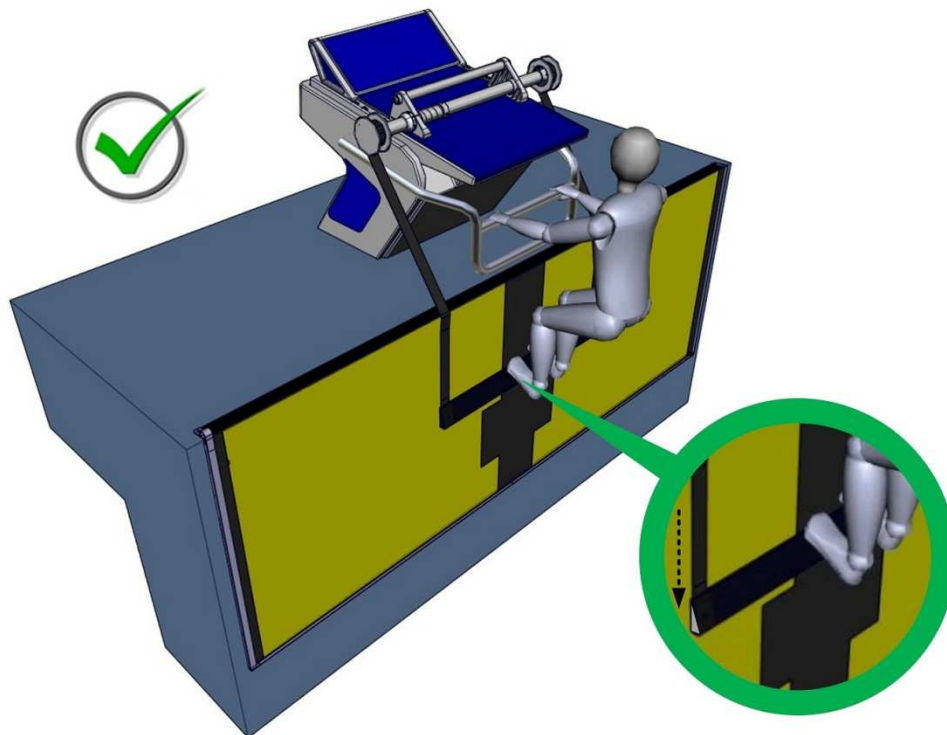
All the components of this unit are designed with the utmost care for the safety of all the users (no burrs, no sharp edges, etc.) but ultimately the most relevant factor is your own attention.

Never use the Backstroke Ledge for any sport, activity or task this product is not designed for. Only the proper use of the Backstroke Ledge is described in this manual. Do not leave this product to unsupervised children. Do not expose the backstroke Ledge to fire or to high temperature sources (e.g. do not lay the product on a radiator to dry).

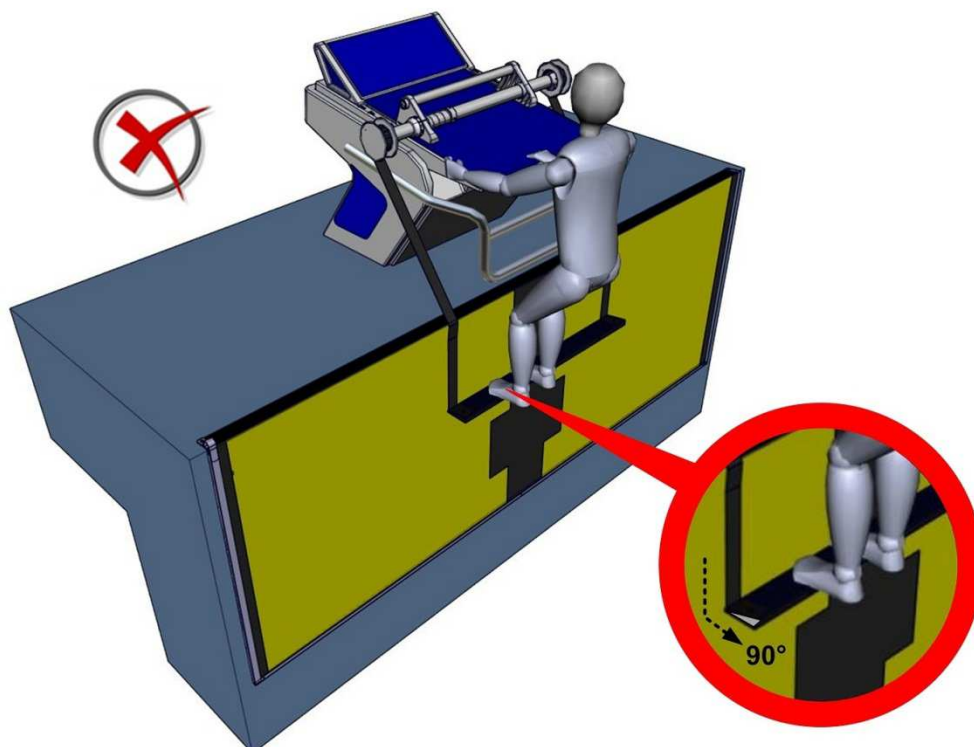
To preserve the device, do not use aggressive cleaners or solvents (e.g. Acetone) which could damage the surface of the ABS components. Refer to chapter 7 (STORAGE AND MAINTENANCE) for details.

2.3 Safety rule for Backstroke Ledge

Improper use of Backstroke Ledge could damage it.

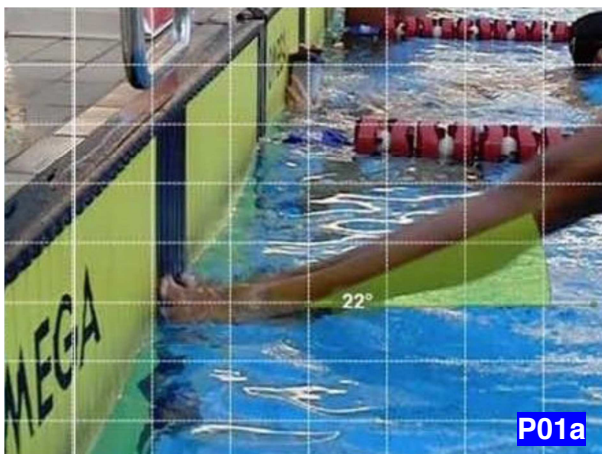


Never put pressure on the Backstroke Ledge when it is in a 90° position.

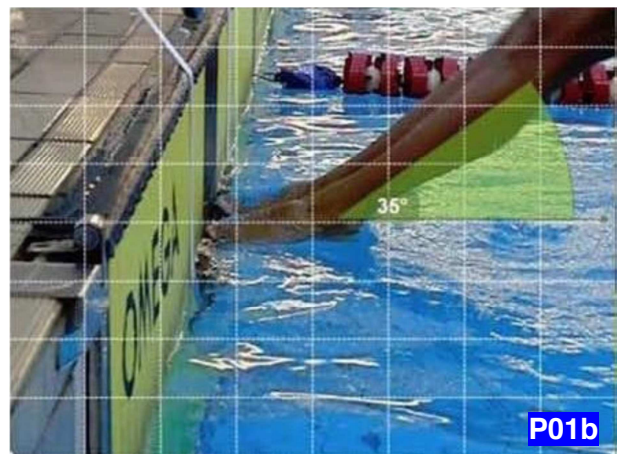


3 PRODUCT DESCRIPTION

The Backstroke Ledge is fully compatible with Omega OSB11, OSB12 and OSB14 (Fina Facilities rules / FR2.7 / “**The height of the platform above the water surface shall be from 0.5 metre to 0.75 metre**”). You have received a product fully assembled and ready to use once unpackaged. Each unit consists of a lower part (which must lean against the end wall of the pool) including a footrest designed to support the swimmer’s push at the start and an upper part to hook the assembly to the starting platform. The upper part also includes a rotating mechanism (Patent Pending) to set the unit to your own starting position and to your size. A return spring allows a “one hand” easy adjustment, also for the athlete in water. The upper handlebar allows an easy grab of the unit for a quick removal after the start.



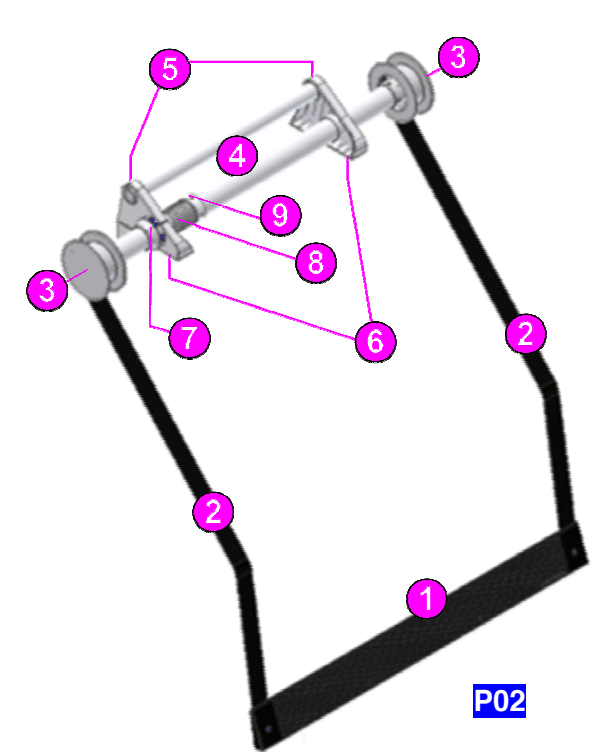
Without Backstroke Start



With Backstroke Start

Using this device, the angle between the legs and the water surface during the final push off the wall is greater. As a result, the swimmer’s feet travel the path during the start phase of flight with less contact with the water.

3.1 Components description



1 Footrest Designed to withstand the large push of a professional athlete start, this component is an injection-moulded piece, made of fiberglass reinforced polypropylene. It also includes a stainless steel inner beam to increase the rigidity and avoid buoyancy. The dotted surface guarantees the highest antiskid grade.

2 Straps Manufactured from high tenacity polyester yarns in a woven structure, no spring effect.

3 Rims Anti-UV, shock resistant ABS moulded parts, designed to host the straps when you pack away the unit.

4 Bars High strength Ø30mm and Ø40mm extruded composite pipes, designed to easily handle the unit.

5 Supports Anti-UV, shock resistant ABS moulded parts. It includes a specific fin to fit into the Omega top slots. The left support also integrates the engagement of the Adjustment Ring gearing (Patent Pending).



6 Pads Two soft PVC pads are glued under the supports, in order to protect the starting platform on which the unit will be installed.



7 Adjustment ring Material : anti-UV, shock resistant ABS.

The numerical scale allows the initial setting of the unit (0 corresponds to water level) and the successive adjustments by the athletes.

8 Spring AISI 302 stainless steel wire-spring, corrosion resistant. It is intended to recall the adjustment mechanism in position.

9 Locking ring ABS moulded ring, fixed to the Ø40mm bar to hold the spring.

Other components

- Metric hexagonal Allen key N°4



P05

- Safety clasp (Chapter 4 / Picture **P11**)

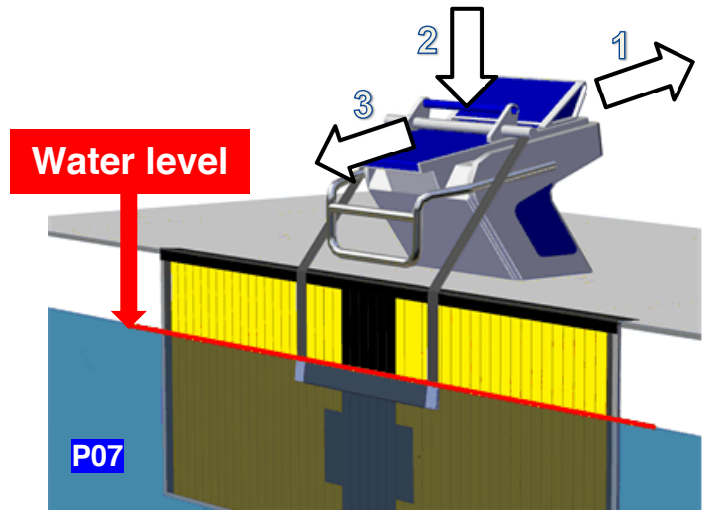


P06

4 INSTALLATION AND SETTING

The Backstroke Ledge has to be installed on the starting platform top, as shown in picture **P07**.

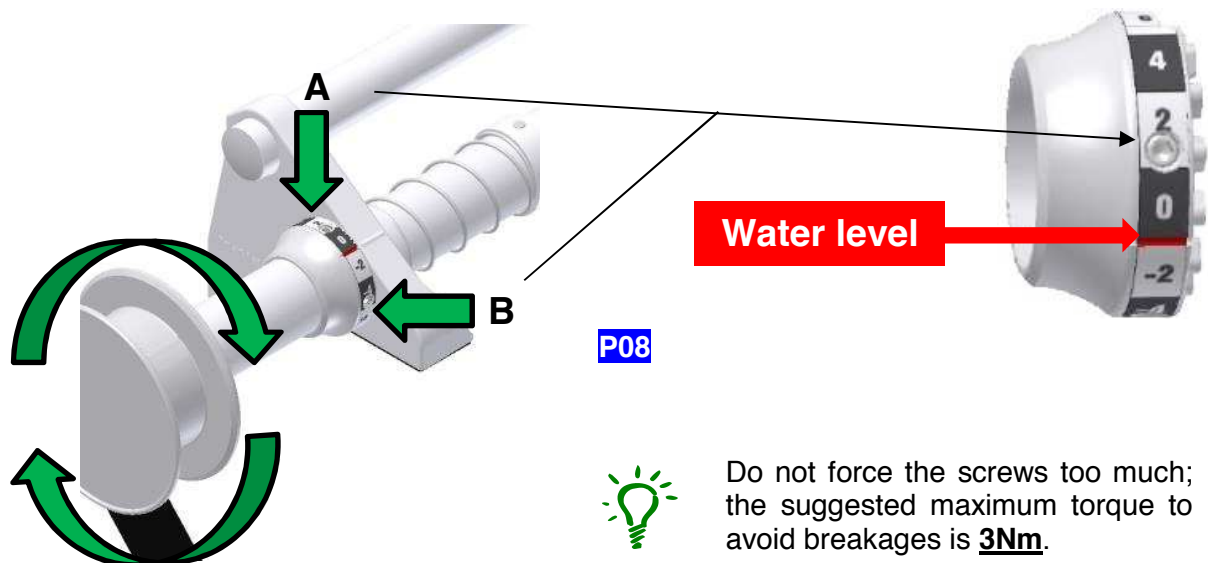
1	Put OSB footrest to position 5 (maximum back).
2	The two fins of the supports 5 have to be inserted into the top slots.
3	Then the unit must slide forward, until it can't slide further.



The Backstroke Ledge footrest should be already set at the water level, if it is not the case proceed as follows:

Release the two screws of the adjustment ring 7 (A and B in picture **P08**) with the provided Hexagonal Allen key, then unroll the footrest 1 downwards. Rewind the straps rotating the rims in the direction shown in picture **P08** by the green arrows, until the upper edge of the footrest is at the water level. Tighten the screws of the adjustment ring 7 keeping the red notch aligned with the index of the support beside.

P08





In order to guarantee the stability of the unit, both straps have to be positioned under the rims, as shown in picture **P09**



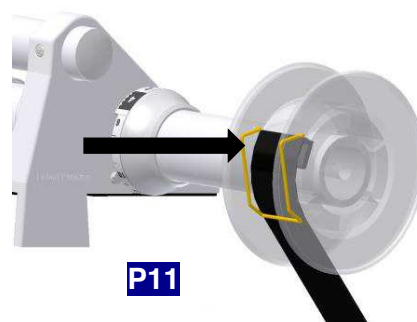
P09



P10

Never position the straps like in picture **P10** because the unit could unhook at the start.

To avoid errors, a specific safety clasp is provided and can be mounted on the left rim **3**, as shown in picture **P11**.




P11

5 USE IN COMPETITION

Before the competition all the units have to be properly installed as described above. The referees are responsible for verifying the compliance of the installation with the competition rules.

Before the start each athlete can adjust the footrest into position as described in chapter 6 (PERSONAL ADJUSTMENTS). Eventual limitations of the adjustment range are out of the scope of this User Manual.

	<p>Always verify that the straps unroll under the rims, as shown in picture P09.</p> <p>Check that the straps are well stretched and that the footrest bar stays in horizontal position.</p>
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After the start the assigned officials (e.g. the inspectors of turns) shall immediately remove the Backstroke Ledge units from the starting blocks, in order to clear the end walls (or the touchpads) to allow the turns.

The removal operation is quick and easy: once the upper handlebar grasped, just lift up the unit and put it aside, on the deck.

6 PERSONAL ADJUSTMENTS

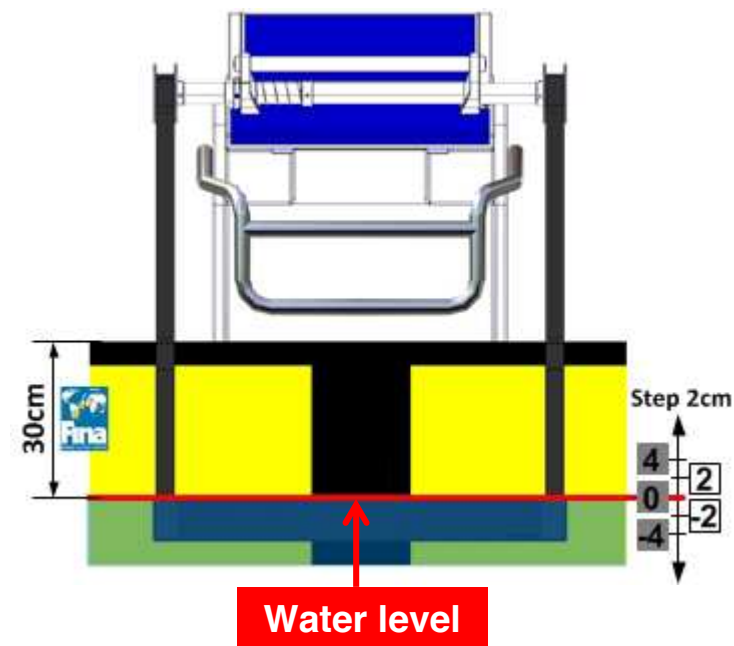
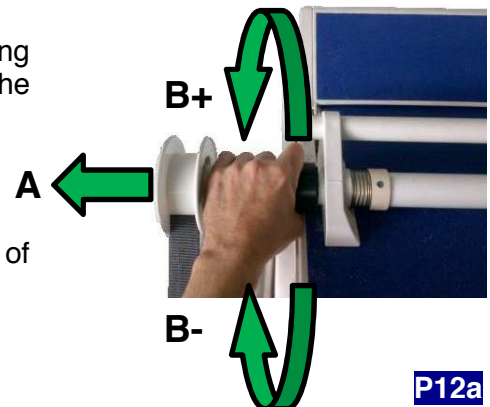
Whatever your ability, we recommend starting with the unit in the **0 (water level)** position. Practice several backstroke starts in order to select your preferred adjustment and to get familiar with this starting device.

Once you are comfortable using the Backstroke Ledge, you will get the best advantage in the swimming competitions.

The adjustment feature is fundamental to adapt the starting position to each swimmer's level, style, age and size.

The adjustment can also be achieved from the water, grabbing the bar with the left hand and pulling to the left (**A**) to unlock the mechanism.

Once rotated to the suitable position (**B**) with the reference of the numerical scale, the spring helps to recall the mechanism.



Five positions are allowed by the standard unit. From the **water level (position 0)** the footrest can be lifted up 2 to 4 cm, or plunged -2 to -4 cm.

P12b

Note that by removing the locking screw indicated in picture **P12c**, more positions are possible, by steps of 2cm. The use of those additional positions should be allowed considering the competition rules, as well as the end wall and the touchpads' specifications.

Anyway the acceptance of additional adjustment positions is out of the scope of this User Manual.



P12c

Personal adjustments are intended to optimize the starting performance.

Make sure that you are comfortable in the waiting position of picture **P13**.



Push on your legs, pulling yourself up with your arms. The footrest angle and antiskid surface allow you a better start-waiting position.



As shown in picture **P15**, the footrest represents a safe anchorage for athlete's feet, avoiding any risk of slipping. -the best psychological help for the backstroke swimmers!



The body starting angle increases considerably, up to 40°, allowing much longer jumping trajectories.



7 STORAGE AND MAINTENANCE

In order to preserve your Backstroke Ledge as long as possible, rinse the unit after each use with fresh water (remove the chlorinated water of the pool). Before the storage, verify that the unit is perfectly dry.

Periodically check if any oxidation has developed on the stainless steel components (screws, springs). Although made of high quality stainless steel, some traces of rust could appear when exposed to aggressive environments (e.g. salted water). If necessary, clean gently: soapy water or a mild detergent is usually safe and successful.

Take the same care of the ABS components to preserve the original colour and appearance. A damp cloth or chamois leather will usually be suitable for cleaning and drying.

Do not store the unit under heavy objects which may deform the plastic components.

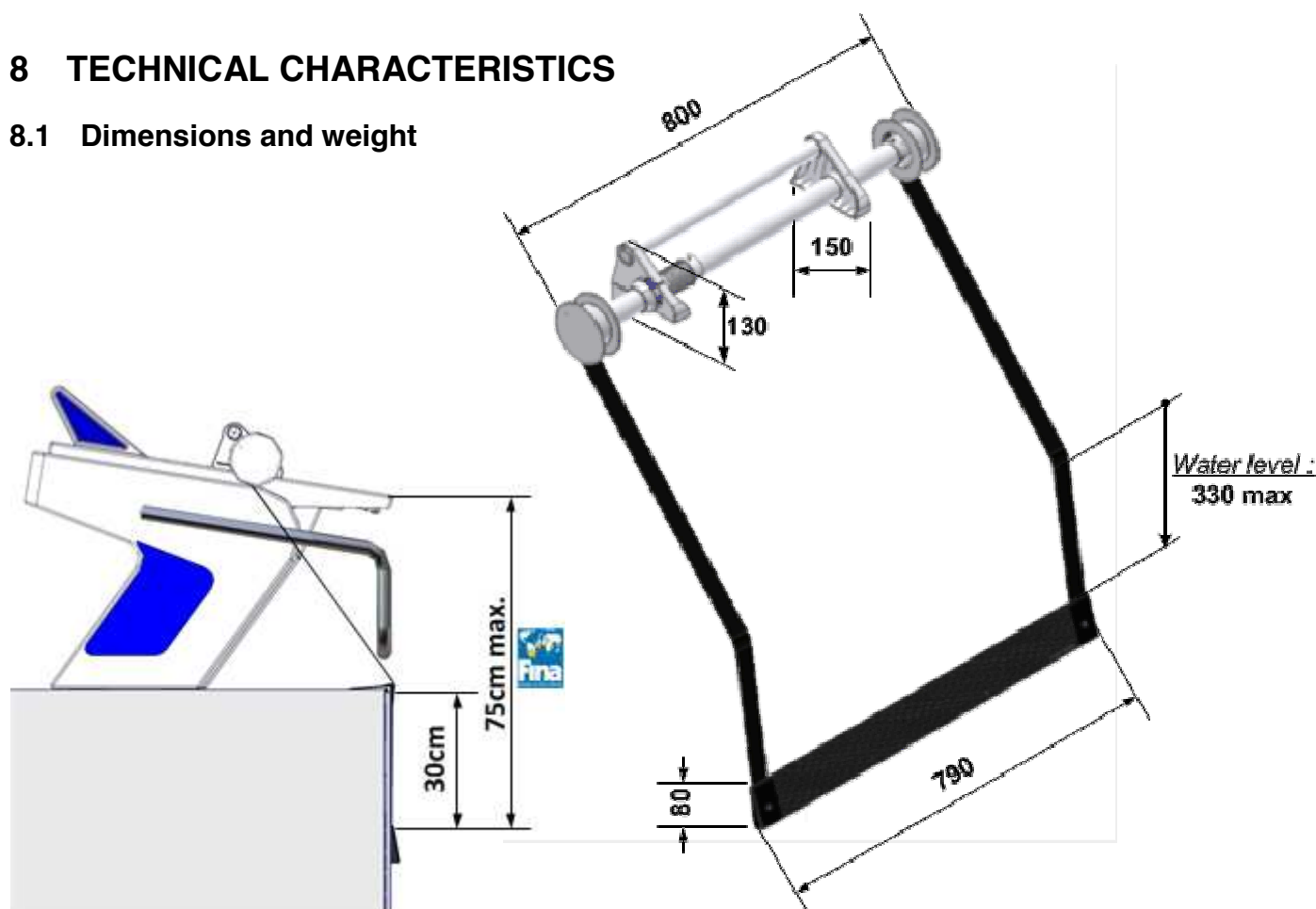
After an eventual severe impact or drop, check if the unit is damaged and, in case of any doubt, do not take the risk of using it.



Always avoid aggressive cleansers as hypochlorite bleaches, chloride-containing cleansers, 95° alcohol, acetone and any other solvents or unsuitable chemical substances.

8 TECHNICAL CHARACTERISTICS

8.1 Dimensions and weight



Dimensions / Dimensions / Grösse (mm):
Weight / Poids / Gewicht (kg):

800 x 150 x 130
2.7

9 FAQ AND FAILURE SOLUTIONS

Is this product compliant with the FINA / LEN rules?

- Yes

One pad  got unstuck. Can I fix it?

- Yes

Glue the pad on the base of the support, using a common cyanoacrylate instant adhesive.

10 APPENDIX

Version history

Version	Date	Modifications since last version
1.0	28.03.2014	Initial version
1.1	15.05.2014	Correction of initial version

NOTES

